IN THE CLAIMS

Please amend the claims as follows:

1. Cancelled

2. Cancelled

3. Cancelled

4. Cancelled

5. (Original) A thermal processing for conducting a thermal process to a plurality of objects to be processed held in a tier-like manner in a processing container, wherein

the processing container is made of metal,

a heating unit that heats the objects to be processed, and a cooling-gas introducing unit having a plurality of blowing holes for introducing a cooling gas into respective areas in the processing container divided in a height direction of the objects to be processed, are provided in the processing container,

a circular space is formed between the processing container and the plurality of objects to be processed held in a tier-like manner,

the cooling-gas introducing unit is a cooling-gas introducing pipe arranged in the circular space and extending in a vertical direction,

the plurality of blowing holes is formed at suitable intervals in the vertical direction of the cooling-gas introducing pipe, and

each blowing hole is formed at a pipe wall of the cooling-gas introducing pipe in order to blow out the cooling gas in a tangential direction of the circular space.

6. (Original) A thermal processing unit according to claim 5, wherein

a plurality of cooling-gas introducing pipes is arranged at suitable intervals in a circumferential direction of the circular space.

7. (Original) A thermal processing unit according to claim 5, wherein

the plurality of cooling-gas introducing pipes has different lengths in the vertical direction.

8. (Original) A thermal processing unit for conducting a thermal process to a plurality of objects to be processed held in a tier-like manner in a processing container, wherein

the processing container is made of metal,

a heating unit that heats the objects to be processed, and a cooling-gas introducing unit having a plurality of blowing holes for introducing a cooling gas into respective areas in the processing container divided in a height direction of the objects to be processed, are provided in the processing container, and

the blowing hole is provided with a porous member.

9. (Currently Amended) A thermal processing unit according to ~~any of claims 5 to 8~~ claim 5, wherein

the processing container has a volume of about 170 liter, and

the cooling-gas introducing unit is capable of introducing a cooling gas into the processing container at a flow rate of 300 to 500 liter / min.

10. (Currently Amended) A thermal processing unit according to ~~any of claims 5 to 9~~ claim 5, wherein

the processing container has a container-cooling unit in which a coolant flows.

11. (Original) A thermal processing unit according to claim 10, wherein

the cooling-gas introducing unit and the container-cooling unit are capable of cooling the objects to be processed to a temperature of 400 °C to 100 °C at a temperature-fall rate not less than about 40 °C / min.

12. (Added) A thermal processing unit according to claim 8, wherein

the processing container has a volume of about 170 liter, and

the cooling-gas introducing unit is capable of introducing a cooling gas into the processing container at a flow rate of 300 to 500 liter / min.

13. (Added) A thermal processing unit according claim 8, wherein

the processing container has a container-cooling unit in which a coolant flows.

14. (Added) A thermal processing unit according to claim 13, wherein

the cooling-gas introducing unit and the container-cooling unit are capable of cooling the objects to be processed to a temperature of 400 °C to 100 °C at a temperature-fall rate not less than about 40 °C / min.